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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,208	11/19/2001	Kazuyuki Ohhashi	P21699	8111
7055	7590	11/22/2006		
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER AGHDAM, FRESHTEH N	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/988,208

Applicant(s)

OHHASHI, KAZUYUKI

Examiner

Freshteh N. Aghdam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 9/8/2006 have been fully considered but they are not persuasive.

Applicant's Arguments: On page 4, applicant argues "there is no proper motivation to modify Sato in the extensive manner necessary to obtain the combination recited in claim 15. Rather, the only motivation to modify Sato in the extensive manner necessary to obtain the combination recited in claim 15 is the improper motivation to obtain Applicant's claims hindsight."

On page 5, applicant argues "there is no proper motivation to place such an amplitude adjustment circuit between phase shifter 201 and phase shifter 202 in Sato insofar as the Admitted Prior Art shown in FIG. 4B explicitly discloses that amplitude adjustment occurs before phase offset. Accordingly, even the modification of Sato with the Admitted Prior Art shown in FIG. 4B would result in the amplitude adjustment circuit being placed before phase shifter 201 and phase shifter 202 in Sato."

On the same page, applicant further argues "Sato moreover fails to disclose that phase shifter 202 "controls a total phase offset amount with the phase offset implemented by the sign inversion circuit to become a desired offset amount" as recited in claim 15."

On page 6, applicant argues "it is not clear why the Examiner believes one of ordinary skill in the art would use such teachings in Omori to further modify Sato."

Examiner's Response: Regarding applicant's first argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Regarding applicant's second argument, there are three components that are coupled together in the order of the "sign inverter" is connected to the "amplitude multiplier" and the "amplitude multiplier" is connected to the "phase shifter". Sato clearly discloses that phase shifter 201 performs sign inversion (means 201; Fig. 2, means 302-303; Col. 5, Lines 6-36) that is coupled to a phase shifter (means 202), which the phase shift amount is less than 90 degrees. The instant application's disclosed prior art teaches that the "amplitude multiplier" is placed before the "phase shifter" (Fig. 4B) in order to improve the level of a reception signal and clearly distinguish between interference signals from other mobile stations and the original reception signal (Pg. 2, Lines 1-5).

Regarding applicant's third argument, Sato teaches that the phase shifter controls a total phase offset amount ( $\pi/4$ ) with the phase offset implemented by the sign inversion circuit (201) to become a desired offset amount (i.e. to produce the spread component signals TX-I and TX-Q; Col. 5, Lines 1-5 and 37-59). Figure 7 of the

instant application discloses that the phase-offset amount fluctuates between 0 and  $\pi/4$  (means 62-64) so as Sato's.

Regarding applicant's fourth argument, Omori teaches placing the "amplitude multiplier" after the "sign inverter" (Fig. 3; Col. 2, Lines 29-64) in order to obtain the desired transmission signal by making the amplitude uniform (Col. 2, Lines 56-64).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freshteh N. Aghdam whose telephone number is (571) 272-6037. The examiner can normally be reached on Monday through Friday 9:00-5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Freshteh Aghdam  
November 16, 2006

  
**KEVIN BURD**  
**PRIMARY EXAMINER**